

**SYSTEM AND METHOD FOR  
PROGRAMMING THE BIT ERROR RATE  
OF FRAME SYNCHRONIZATION WORDS IN A  
MULTIDIMENSIONAL DIGITAL FRAME STRUCTURE**

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**ABSTRACT OF THE INVENTION**

A system and method have been provided for programming synchronization features of a multidimensional digital frame structure. Such a frame structure acts as a digital wrapper, and includes overhead, payload, and forward error correction (FEC) sections. Words in the overhead section are used to synchronize the frame structure. The described invention permits the bit error rate (BER) of the frame synchronization bytes (FSBs) to be made programmable, so that the system and method are flexible for changes in communication protocols. This flexibility also impacts the number, the location, bandwidth, and the value the FSBs.